



2030 Transportation Plan

Board Workshop

September 28, 2010

Background

What's happened since May workshop?

- Draft proposed policy changes
- Coordination with City Engineers
- Coordination with Met Council
- Open House - Sept 22
- City Administrators – Sept 24
- Dakota County Planning Commission - Sept 23
- Follow-up to May workshop

Transportation Plan – Key Considerations

- Aging System: Higher Needs for Preservation and Replacement
- System Congestion Held Steady with Expansion Investments and for Short Term Future
- Overall – System Better Now than 2004
- Increasing Role of Alternative Modes
- Expected Revenue Changes
 - County Funding: Reduction, Focus on CR System
 - CSAH Funding: Increases

Workshop Purpose

- Transit Plan Integration
- Plan Principles
- By Plan Goal:
 - *Proposed policy revisions*
 - *Investment Targets*
- Summary of Needs vs. Revenues

Transit Plan Integration



Key Transit Developments

- Transit Office created
- 2008 Transit Plan: Action Items
- Transportation CIP:
 - Isolated county transit activities
- Development of a RRA CIP
 - Cedar
 - Red Rock
 - Robert Street
- CTIB Grant Process
 - Capital and operating planning 2009 – 2030
- High speed/intercity passenger rail

Transit Plan Integration - Purpose

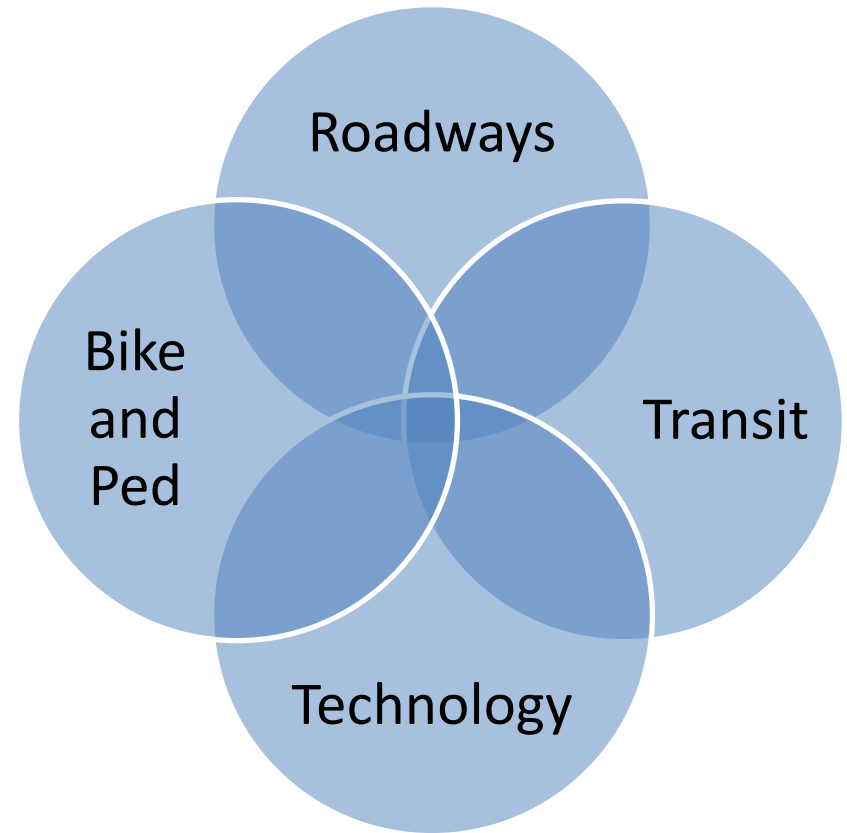
Goals/Outcomes For Plan Integration:

- Acknowledge transit as a growing priority and an integral part of the system
 - Demographics & Transit-dependent populations
- Acknowledge the county's expanding role
- Account for costs and benefits
- Measure effectiveness



Transit Plan Integration - Purpose

- Another tool for seeking multi-modal solutions
- No longer a stand alone document
- Incorporate into the Plan as the way we do business



Transit Plan Integration

2008 Transit Plan:

- Creates goals and action items
- Identifies the county's transit role and responsibilities:
 - transit planning
 - project development
 - outreach
- Identifies transit markets in the county

2030 Transportation Plan:

- Are incorporated as policies and strategies
- Restates County's transit role and responsibilities
 - Identifies how the county will integrate transit considerations in planning, project development, maintenance and preservation.
- Updates transit market information through demographics

Transit Plan Integration

2008 Transit Plan:

- Establishes priority transit corridors:
 - Regional transitways
 - County corridors
- Creates an inventory of providers and facilities
- Describes the relationship with land use, development and sustainability

2030 Transportation Plan:

- Identifies priority transit corridors:
 - Regional transitways
 - County corridors
- Updates inventory of services, providers and facilities, high speed rail
- Relationship with land use, development and sustainability
- Identifies emerging issues/needs/opportunities
- Provides and financial/funding outlook

Plan Definitions

- **Principle** - A fundamental guideline that applies to all Plan goals
- **Goal** – What we intend to accomplish (desired outcome)
- **Strategy** – An action that is taken to achieve a goal
- **Policy** – A formal adopted practice that clarifies how to implement goals and strategies

Policy Changes - *Considerations*

- Good Value for the Public
- Maintaining/Strengthening Partnerships
- Protecting County Interests
- Formalize current practice where appropriate
- Delete/consolidate to reduce Plan redundancy and improve clarity
- Remove details or specific requirements if identified in County procedures documents, State Statutes, or other regulatory documents

Policy Changes - *Considerations*

- Formalize current practice where appropriate
- Delete/consolidate to reduce Plan redundancy and improve clarity
- Remove details or specific requirements if identified in County procedures documents, State Statutes, or other regulatory documents

Policy Changes - *Considerations*

Cost Implications of Policy Changes fall into one of three categories:

1. Included in investment targets
2. Determined project-by-project through CIP
 - Difficult to measure now
 - Are based on a specific improvement
 - None of these changes are expected to have a significant effect on future CIP's.
3. Won't result in significant change in costs

Transportation Plan - Organization

- **Plan Principles** Chapter (Applies to all Goals)
- Goal Chapters
 1. Limited **Resources** are Directed to the Highest Priority Needs of the Transportation System
 2. **Preservation** of the Existing System
 3. **Management** to Increase Transportation System Efficiency, **Improve Safety** and Maximize Existing Highway Capacity
 4. **Replace** Deficient Elements of the System
 5. Improvement and **Expansion** of Transportation Corridors
 6. **Integrate Transportation Modes**

Plan Principles

*Overarching Principles That
Apply To All Plan Goals*



Plan Principles

- Transportation Planning
- Safety and Standards
- Social, Economic and Environmental Impacts
- Public and Agency Involvement
- NEW: Employ context sensitive design, complete street philosophies, and operational practices that effectively consider all transportation modes and allow for the safety of all users

Goal 1: Resources

*Limited **Resources** are Directed to the Highest Priority Needs of the Transportation System*



Goal 1: Resources

New Policies or Major Policy Revisions

– Cost Participation for

- Transit
- Streetlighting
- Small Safety Projects
- Roundabouts
- Future County Road Segments
- Local Roadway System
- Regional Projects – City Maximum
- Storm Sewer System Repair/Maintenance

Goal 1: Resources *New Policy*

Cost Participation for *Transitways*

1. Participate in local share of regional transitway improvements as required by CTIB. Participate up to 80% of local share for transit components of highway improvements along regional transitways.
2. Include transit infrastructure improvements in overall 55/45 policy, including bus pullouts, bus shelters, and all pedestrian facilities necessary to support transit.

Goal 1: Resources *Revised Policy*

Street Lighting

Street Lighting of:	County cost participation percentage for		
	New Installation	Maintenance	Utility Cost & Routine Maintenance
Stop-controlled intersections for safety benefit	100%	100%	100%
Signalized intersections	55%	100%	0%
Roundabouts	55%	55%	0%
Transit corridors	55%	0%	0%

Note: Routine maintenance includes relamping, cleaning and painting only.

Goal 1: Resources *New Policy*

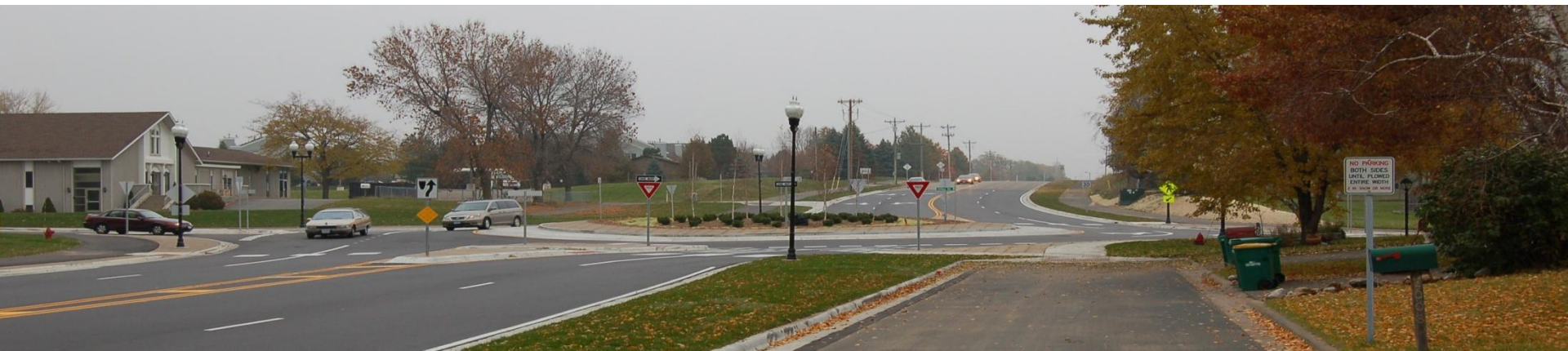
Cost Participation for *Small Safety Projects*

- Participate up to 100% to address documented safety issue
 - Median closures or modifications
 - Access closures or modifications
 - Intersection safety street lighting
 - Turn lanes or channelization at the intersection of two County roadways
 - Guardrail installation
 - ADA required safety improvements

Goal 1: Resources *New Policy*

Cost Participation for *Roundabouts*

- Participate up to 55% for eligible items, including integral design elements
 - Street Lighting
 - Line of Sight Treatments
 - Pedestrian Safety and Accessibility Treatments



Goal 1: Resources *New Policy*

Cost Participation for *Future County Road Segments*

- At County discretion, participate in costs to construct to County standards over and above city collector street standards.



Goal 1: Resources *Revised Policy*

Cost Participation for the *Local Roadway System*

- Added flexibility to participate up to 55% for construction of local roadways if the project eliminates or significantly delays the need to expand the County highway system.



Goal 1: Resources *Revised Policy*

Cost Participation - *Roadways*

*City maximum share is 25 percent of **total** cost of regional County highway expansion projects:*

- Principal arterials*
- Segments designated for ½ mile full access spacing*
- Interchanges*



Goal 1: Resources *Revised Policy*

Cost Participation for Traffic Signals



- Participate up to 55% for construction of new signals and signal revisions for operations
 - Consistent with larger 55/45 policy and now with new roundabout policy
- Participate up to 100% for pure safety projects
- Participate based on approach legs for existing signal replacements

Goal 1: Resources *Revised Policy*

Cost Participation for Storm Sewer System Maintenance

- Up to 80%, share the cost of maintaining:
 - Roadway catch basins
 - Pipes connecting catch basins to mainline pipes
- Based on contributing flow, share the cost of maintaining:
 - Mainline pipes
 - Storm water treatment and mitigation facilities
- Projects must be included in the adopted CIP or be County approved prior to incurring costs

Goal 1: Resources

Updates

“Aggregate Tax Distribution 2008-2010”
- In Binder

Goal 2: Preservation

Preservation of the Existing System



Goal 2: Preservation *Revised Policies*

Mowing

- Revised to indicate up to six times per year and to emphasize safety



Mailbox Replacement

- Revised to state County will replace if disturbed by a County project or maintenance activity
- Safety hazards still resident responsibility

Preservation Investments (Per Year)

TOTAL

Average Yearly Preservation Investment Needs

Activity	2004 Plan	2005-2009 CIP	Future Needs		
			2011-2015	2016-2020	2021-2030
Bituminous	3.0	3.3	3.0	3.2 *	3.4 *
Gravel	0.4	0.5	0.5	0.5	0.5
Pvmt Markings	0.2	0.3	0.3	0.3	0.3
Bike Trails	0.1	0.1	0.2	0.3	0.4
Storm Sewer	0.0	0.0	0.3	0.3	0.3
Totals	3.7	4.2	4.3	4.6	4.9

* To be verified based on PQI assessment later in 2010.

CR Preservation Investments (Per Year)

County Road

Avg Yearly Preservation Investment Needs

Activity	County Road Future Needs		
	2011-2015	2016-2020	2021-2030
Bituminous	0.8	0.8 *	0.8 *
Gravel	0.5	0.5	0.5
Pvmt Markings	0.1	0.1	0.1
Bike Trails	0.1	0.1	0.2
Storm Sewer	0.1	0.1	0.1
Totals	1.6	1.6	1.7

* To be verified based on PQI assessment later in 2010.

Goal 3: Management

Management to Increase Transportation System Efficiency, Improve Safety and Maximize Existing Highway Capacity



Goal 3: Management *Revised Policy*

Access Spacing Guidelines

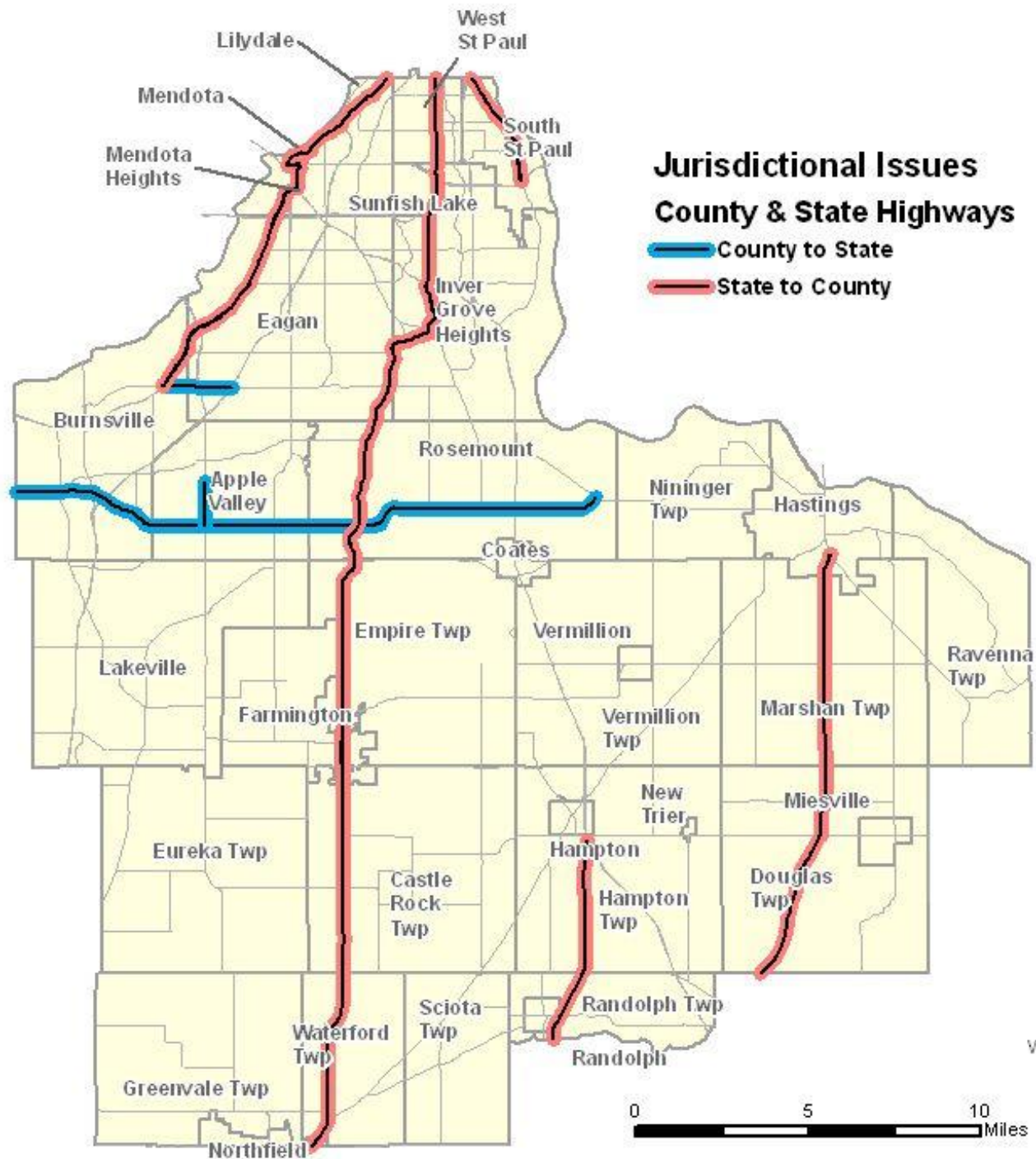
- Speed considerations for undivided roads
 - Reduced access spacing for low-speed, higher volume
 - Increased access spacing for high-speed, low volume
- Flexibility for partial access (3/4 or RI/RO) on high volume roadways contingent on study



Goal 3: Management

10-Ton Routes – Implementation Criteria

- Included on System Map
- Adequate Pavement Structure and Cross-Sectional Design
- Provides Primary Access to Intensive Industrial Development
- Provides Primary Access to Trunk Highways or other 10-Ton Routes
- Has Support of Cities By Resolution
- Public Hearing
- Board Resolution
- Approval by Commissioner of Transportation



Management Investments (Per Year)

TOTAL		Average Yearly Management Investment Needs			
Activity	2004 Plan	2005-2009 CIP	Future Needs		
			2011-2015	2016-2020	2021-2030
Access Mgmt	2.7	1.7	-	-	-
Jurisdictional Class.	0.3	0.5	0.3*	0.6*	0.4*
Safety & Mgmt	1.0	3.6	5.5**	5.5**	5.5**
Signal Projects	1.0	1.0	1.0	0.7	0.7
R/W Preservation	1.0	1.0	1.0	1.0	1.0
Transit Infrastructure	-	0.1	0.1	0.1	0.2
Totals	6.0	7.9	7.9	7.9	7.8

* Assumes staff recommended approach to turnbacks.

** Includes combination of Safety&Management AND Access Management.

Note: 10 Ton system implementation assumed at no cost.

CR Management Investments (Per Year)

County Road	Avg Yearly Management Investment Needs		
	Future Needs		
Activity	2011-2015	2016-2020	2021-2030
Access Mgmt	-	-	-
Jurisdictional Class.	0.3*	0.6*	0.4*
Safety & Mgmt	1.4**	1.4**	1.4**
Signal Projects	0.0	0.0	0.0
R/W Preservation	0.3	0.3	0.3
Transit Infrastructure	0.0	0.0	0.0
Totals	2.0	2.3	2.1

* Assumes staff recommended approach to turnbacks.

** Includes combination of Safety&Mgmt AND Access Mgmt.

Note: 10 Ton system implementation assumed at no cost.

Goal 4: Replacement

*Replace Deficient
Elements of the System*



Goal 4: Replacement *New Policy*

Highway Replacement

- Reconstruct highways or highway elements that have exceeded their useful life based on structural, functional, operational or safety factors



Goal 4: Replacement

Highway Replacement Investment

- Identifying a reasonable investment target:
 - 2011-2015 Target based on actual needs, which match projects identified in the current Draft CIP (\$5M/yr)
 - Turnback segments have been removed from this target (address through jurisdictional needs)
 - Adjusted general expected road life to 70 years
 - Actual prioritization and timing of projects will still be based on a number of factors, per proposed policy.

Highway Replacement Needs (Per Year)

HIGHWAY REPLACEMENT INVESTMENT NEEDS*

	Miles (total)			Cost (per yr)		
	2011-2015**	2016-2020	2021-2030	2011-2015**	2016-2020	2021-2030
CR	7.0	3.1	1.3	\$2.5	\$1.1	\$0.2
CSAH	7.0	31.4	47.2	\$2.5	\$11.3	\$8.5
Total	14.0	34.5	48.5	\$5.0	\$12.4	\$8.7

* Assumes reconstruction of road segments at 70 years of age at \$1.8M/mile. More analysis is required to assess the safety and structure of individual roadway segments to better determine actual replacement needs. Miles/Costs do not include gravel roads or roadway segments that have been identified for expansion needs or turnback needs.

** Based on actual assessment of needs over the next 5 years. These costs have been programmed in the Draft 2011-2015 CIP.

Replacement Investments (Per Year)

TOTAL

Average Yearly Replacement Investment Needs

Activity	2004 Plan	2005-2009 CIP	Future Needs		
			2011-2015	2016-2020	2021-2030
Bridge*	0.8	0.0	0.3	0.1	0.3
Highway Recon.**	2.4	12.5	5.0	12.4	8.7
Gravel Paving***	1.0	2.0	1.3	1.5	1.7
Signal Projects	-	0.0	0.2	1.5	1.4
Totals	4.2	14.5	6.8	15.5	12.1

* Based on Bridge ages. Replacement costs will also depend on Sufficiency Rating.

** Additional safety and structural analysis to be completed

*** Assumes reconstruction and paving at 300+ ADT

CR Replacement Investments (Per Year)

County Road	Avg Yearly Replacement Investment Needs		
	Future Needs		
Activity	2011-2015	2016-2020	2021-2030
Bridge*	0.2	0.0	0.1
Highway Recon.**	2.5	1.1	0.2
Gravel Paving***	1.0	1.2	1.4
Signal Projects	0.0	0.0	0.0
Totals	3.7	2.3	1.7

* Based on Bridge ages. Replacement costs will also depend on Sufficiency Rating.

** Additional safety and structural analysis to be completed

*** Assumes reconstruction and paving at 300+ ADT

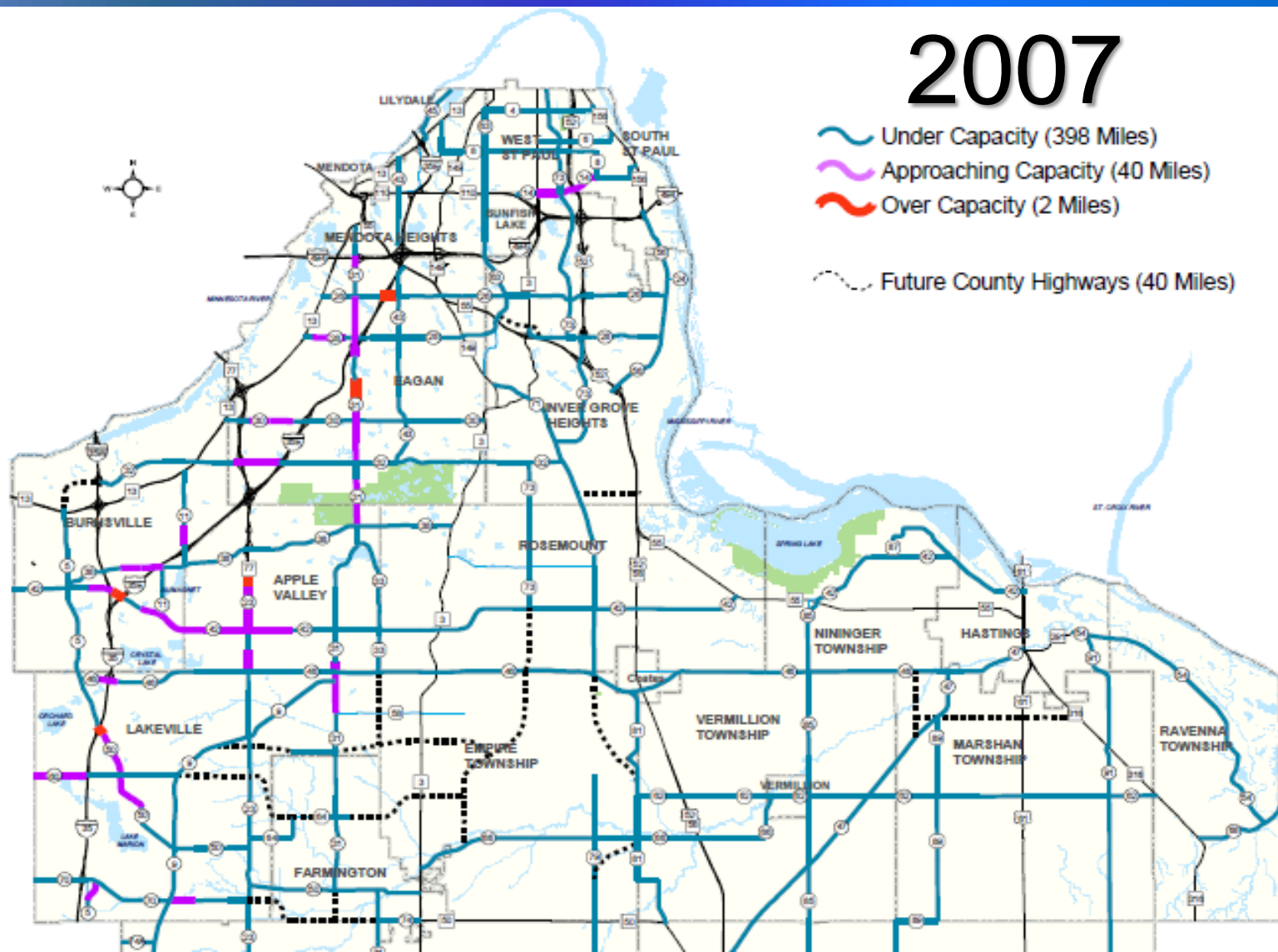
Goal 5: Expansion

*Improvement and **Expansion** of
Transportation Corridors*

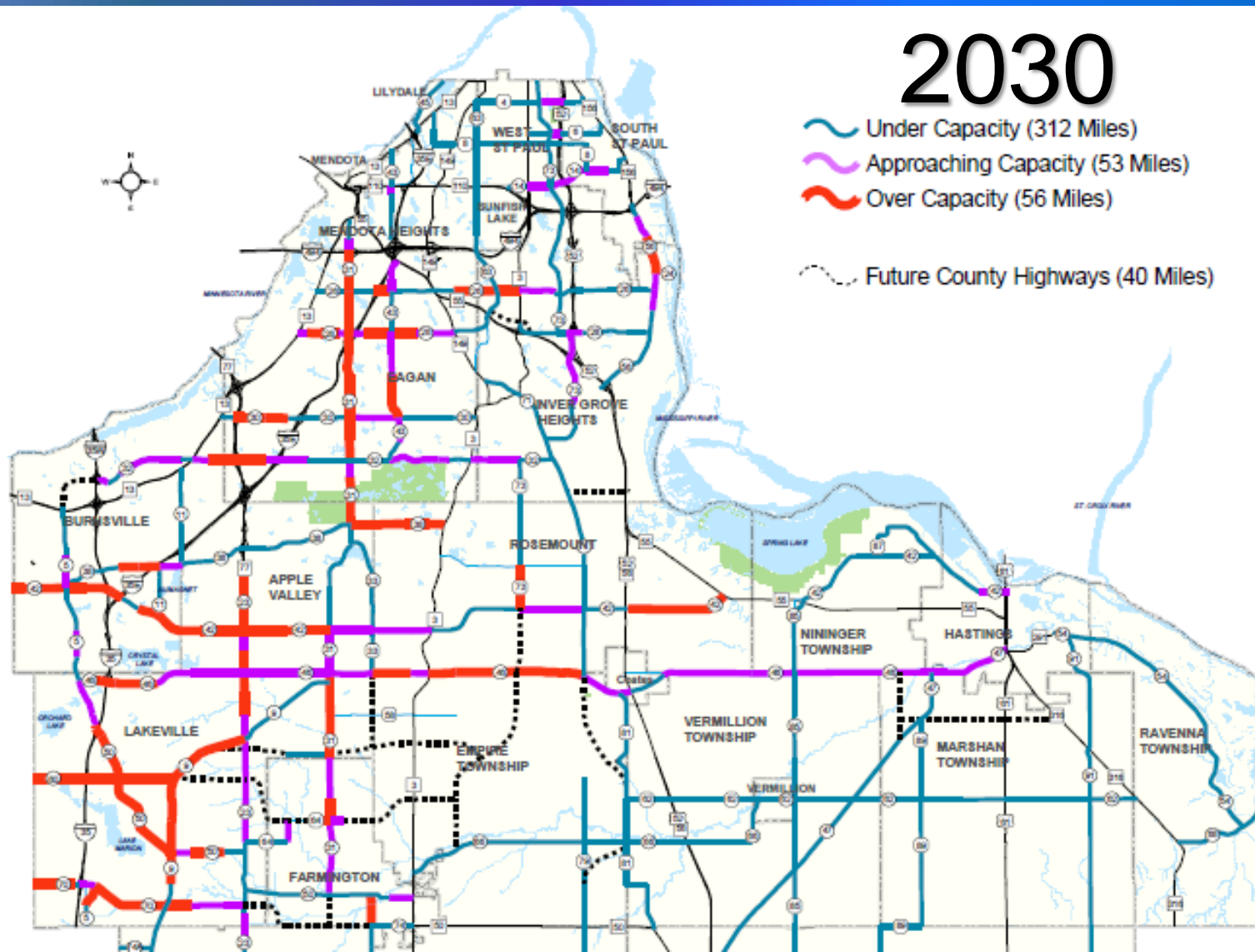


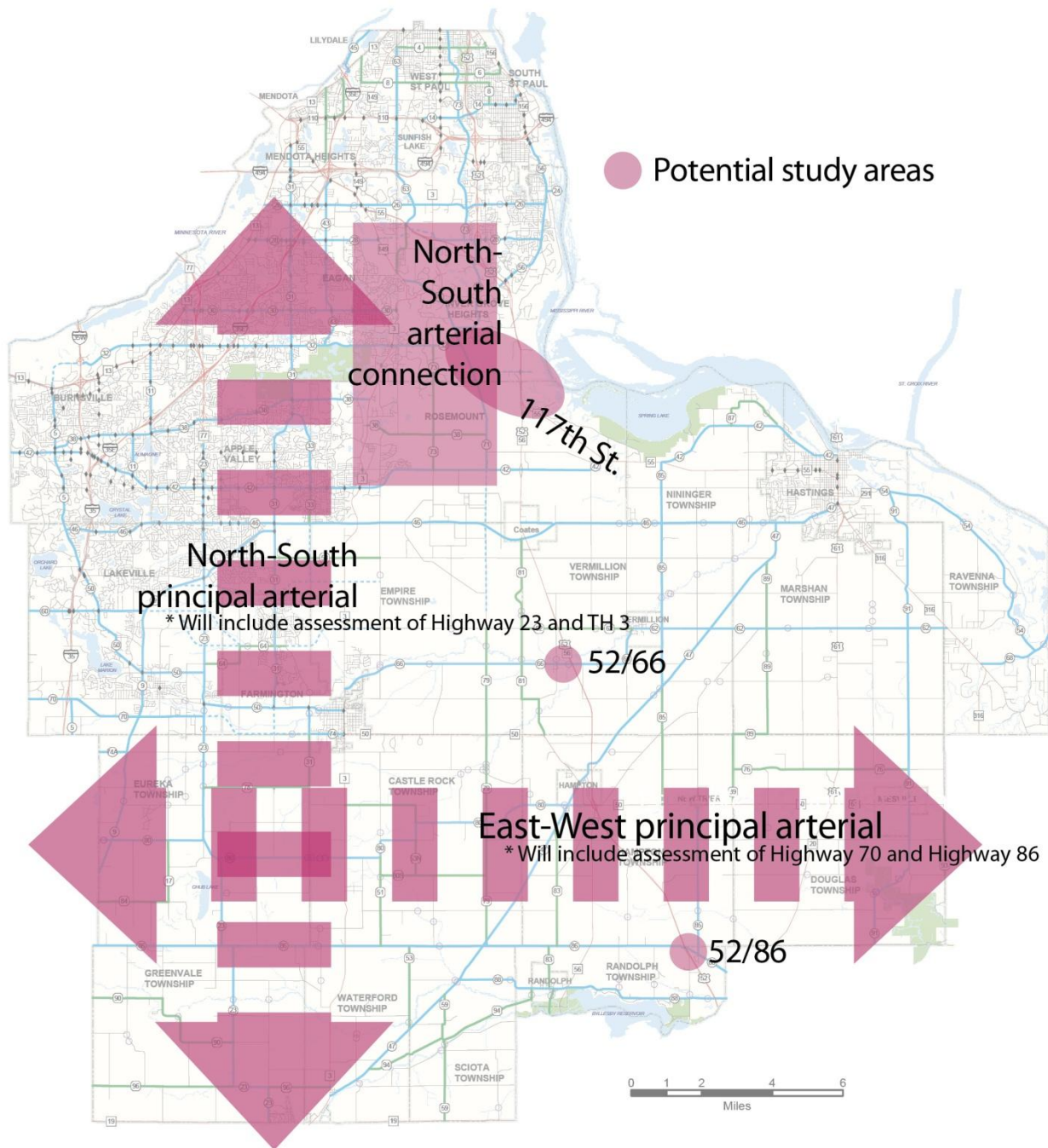
Goal 5 - Expansion

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Goal 5 - Expansion





Expansion Investments (Per Year)

TOTAL

Average Yearly Expansion Investment Needs

Activity	2004 Plan	2005-2009 CIP	Future Needs		
			2011-2015	2016-2020	2021-2030
Lane Addition	8.0	10.5	7.1	13.8	32.1
New Alignments	6.0	3.1	0.7	0.8	0.9
Future Studies	0.3	0.5	0.5	0.5	0.5
Interchanges	0.0	7.4	5.0	9.0	12.5
Totals	14.3	21.5	13.3	24.1	46.0

CR Expansion Investments (Per Year)

County Roads

Avg Yearly Expansion Investment Needs

Activity	Future Needs		
	2011-2015	2016-2020	2021-2030
Lane Addition	0.0	0.0	1.2
New Alignments	0.7	0.8	0.9
Future Studies	0.5	0.5	0.5
Interchanges	0.0	0.0	0.0
Totals	1.2	1.3	2.6

Goal 6: Integrate Transportation Modes

Integrate Transportation Modes to maximize efficiency of the transportation system



Goal 6: Integrate Modes Revisions

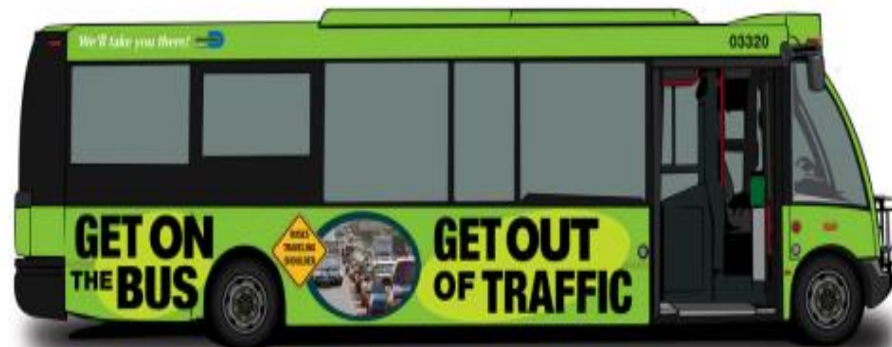
- New goal title: “Integrate Transportation Modes” (used to be “Alternatives”)
- Integrate transit, bicycle, pedestrian, and vehicular modes together
- Strategies and Policies are therefore focused on Mode Integration

Transit Plan Action Items

- **Near-term Activities: 2008 – 2011**
 - Focused on building partnerships
 - 2030 Comp Plan development
 - Move transitway projects forward
- **Mid-term Activities: 2011 – 2022**
 - Using transit as a development tool
 - Reduce costs, expand access
- **Long-term Activities: 2022+**
 - Identify long-term funding sources

Transit – Emerging Issues

- Land use and transportation connection
 - Relationship to transit ridership and efficient services
 - Transit oriented development/economic development
- Sustainability
 - Facilities
 - Services



Transit – Emerging Issues

Transit Technology

- Transit Signal Priority
 - Application on Cedar Avenue
- Customer Communications
 - Real time information
 - Stations
 - Hand held devices
 - WI-FI
 - Trip Planning



Transit – Emerging Issues

Public/Private and Public/Public Partnerships

- Economic Development
 - Transit Oriented Develop Plans/Districts
 - I-35W, Cedar Avenue, Robert Street, Red Rock
 - CR 28, 32, 42, 46, 50
- Employer-based Solutions
 - Transportation Management Organizations
 - Employee Transit Programs
- Mobility Management
 - Myriad of transit services, programs, regulations

Transit – Emerging Issues

Funding and Financial Outlook

- Regional Transitways
 - Cedar Bus Rapid Transit: \$255 million
 - Red Rock Commuter Rail: \$366 million
 - Robert: \$111 million – \$1.03 billion
- New Starts Development Process
 - Small Starts Program
- Operating Revenues
 - Identify transit priorities

Integration Investments (Per Year)

TOTAL

Average Yearly Integration Investment Needs

Activity	Future Needs		
	2011-2015	2016-2020	2021-2030
Cedar Ave Implementation	3.6	3.8	7.1
Robert Street Corridor	*	*	*
Red Rock Corridor	**	**	**
Totals	3.6	3.8	7.1

* Total Robert Street Corridor needs are currently estimated between \$111M - \$1B.

** Total Red Rock Corridor needs are currently estimated at \$366M.

Timing and funding sources, including potential County funding share for Robert Street and Red Rock Corridors, are yet to be determined. These needs therefore will be identified separate from overall County transportation system needs.

Transportation Revenues (Per Year)

Anticipated CIP General Revenues (2011-2015)

County Funding (No CPA)	\$5.2 million
Wheelage Tax	\$1.7
Gravel Tax	\$0.2
Regional Rail Levy	\$1.1
CSAH*	\$10.0
City Cost Participation	\$7.0
State Trunk Highway	\$2.5
State Bridge Bonds	\$0.2
Federal Aid	\$5.0

TOTAL \$32.9 million

*Includes Flexible Highway Account and Leased Motor Vehicle Sales Tax Revenues

Total Investment Needs (Per Year)

TOTAL

Average Yearly CIP Investment Needs

Activity	2004 Plan	2005-2009 CIP	Future Needs		
			2011-2015	2016-2020	2021-2030
Goal 1 - Resources	-	1.9	3.2	-	-
Goal 2 - Preservation	3.7	4.2	4.3	4.6	4.9
Goal 3 - Management	6.0	7.9	7.9	7.9	7.8
Goal 4 - Replacement	4.2	14.5	6.8	15.5	12.1
Goal 5 - Expansion	14.3	21.5	13.3	24.1	46.0
Goal 6 - Alternatives	0.9	-	3.6	3.8	7.1
Totals	29.1	50.0	39.1*	55.9	77.9

* Total Revenues for 2011-2015 are projected to be \$32.9M/Yr. The current Draft CIP averages \$38.2M/Yr. Additional state/federal funds will need to be identified to support the projects and timeframes in the Draft CIP.

CR Total Investment Needs (Per Year)

County Roads	Avg Yearly CIP Investment Needs		
	Future Needs		
Activity	2011-2015	2016-2020	2021-2030
Goal 1 - Resources	1.4	-	-
Goal 2 - Preservation	1.6	1.6	1.7
Goal 3 - Management	2.0	2.3	2.1
Goal 4 - Replacement	3.7	2.3	1.7
Goal 5 - Expansion	1.2	1.3	2.6
Goal 6 - Alternatives	1.1	1.1	1.1
Totals	11.0*	8.6	9.2

*Actual Draft 2011-2015 CIP Averages \$10.6M/Year.

Expected County Funding Revenues are currently \$8.2M/year.

Difference in the current Draft 2011-2015 CIP is:

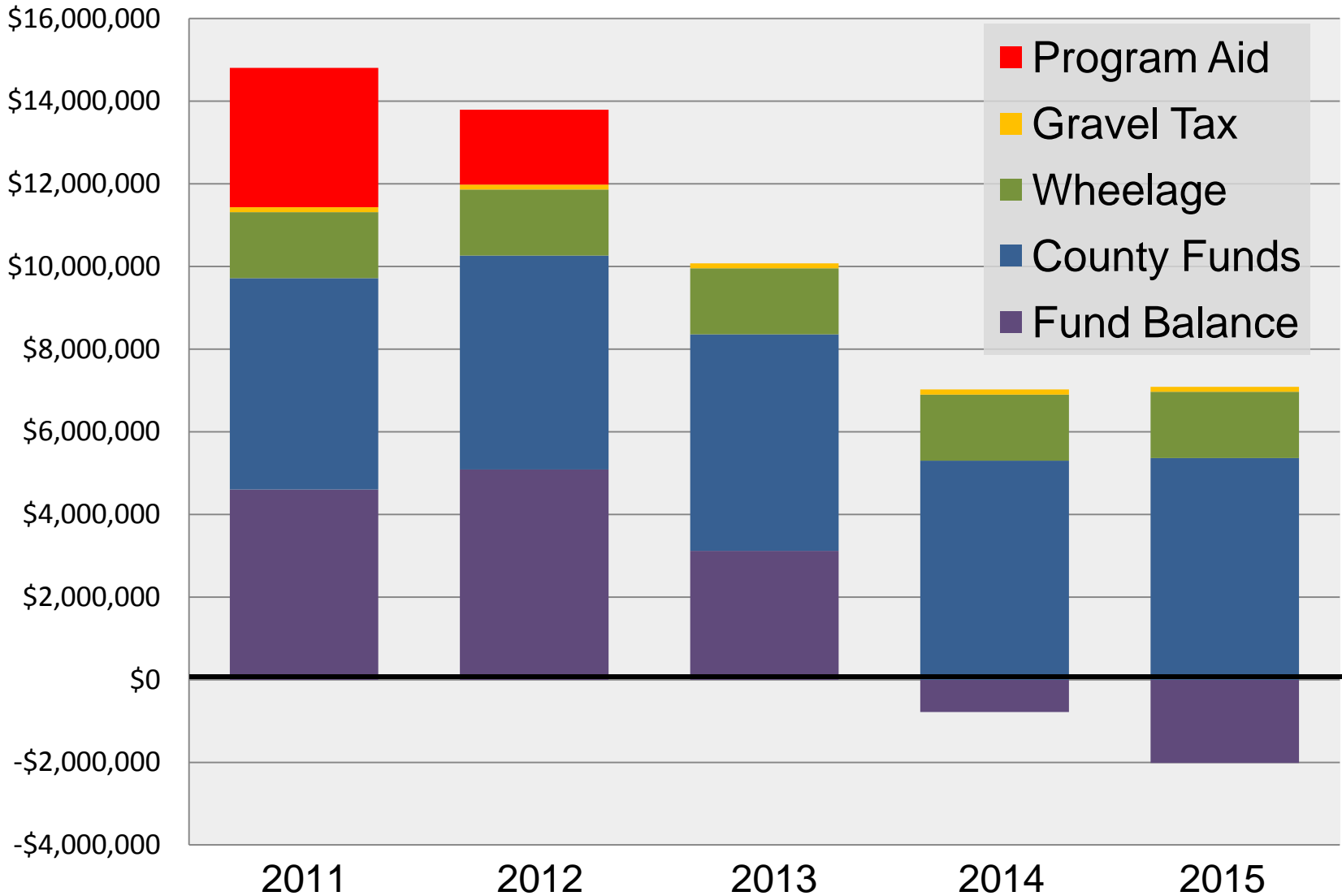
County Program Aid	\$1.0M/Yr
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Transportation Fund Balance	<u>\$0.9M/Yr</u>
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5 Year CIP Balance	(\$0.5M/Yr)
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5 Year CIP Funding Summary

(County Revenues Only)



Next Steps

Incorporate Board Feedback	SEPT
Develop Draft Document	OCT / NOV
Board Authorization To Release Draft Plan for Comment	DEC
Board Approval of Draft Plan	JAN / FEB
Submit approved plan to Metropolitan Council (Comprehensive Plan Amendment)	JAN / FEB



Discussion